

PLASTIC DOUBLE-WALLED STRUCTURAL PANEL

ABSTRACT

The present invention is directed to a plastic double-walled structural panel suitable for use as a door or tailgate for a motor vehicle. The structural panel includes a plastic outer panel, a plastic inner panel, and a substantially plastic support structure. Generally, the plastic outer panel has one or more outer attachment points that correspond to one or more inner attachment points in the inner panel. In a preferred embodiment of the invention, the support structure is comprised of plastic and is formed integrally with the inner or outer panel, e.g., as integral trusses. Integrally-formed or non-integrally-formed connectors may be included for connecting attachment points of the inner panel and attachment points of the outer panel. The invention further includes a method for manufacturing and assembling a substantially plastic double-walled structural panel that is suitable for use in connection with motor vehicles.